

REMARKS

Claims 1-4 stand rejected under 35 U.S.C. 112, second paragraph, as being indefinite. In response, Applicants have amended independent claim 1 of the present invention to be consistent with paragraph 109 and Fig. 12 of the present Application, as noted by the Examiner, and respectfully traverse. Applicants submit that the outstanding Section 112 rejection has been overcome by this amendment.

Claims 1-4 stand rejected under 35 U.S.C. 102(b) as being anticipated by Karube et al. (U.S. 6,072,456). Applicants respectfully traverse this rejection because Karube does not disclose (or suggest) a liquid crystal display where each data signal line is driven by a plurality of driving devices together simultaneously so as to increase the driving capability of the display, as in claim 1 of the present invention, as amended.

Karube features a display device where each data signal line is driven by a single one only of a plurality of driver blocks 11-14. (See Fig. 1). Although the Examiner is correct in asserting that a single one of the driver blocks may drive two data lines 707 within that block, Karube does not teach or suggest that the same data signal line 707 is driven by more than one of the *driver blocks* together simultaneously.

In contrast, independent claim 1 of the present invention as amended recites, among other things, that each data signal line is driven using a plurality of driving devices together simultaneously. As discussed above, Karube shows no such analogous configuration. Claim 1 further recites that the plurality of driving devices together simultaneously drive each data signal line to increase the driving capability of the display. Karube's disclosed configuration, on the other hand, would not serve to increase the driving

capability of the device, because only one driver drives each data signal line individually. For at least these reasons, the Section 102 rejection of claims (and its dependent claims 2-4) based on Karube is respectfully traversed.

Additionally, Applicants wish to point out that Karube does not even teach that each driver block 11-14 *simultaneously* drives two data lines within each block, as asserted by the Examiner on page 3 of Paper No. 8. As previously argued (pages 5 through 8 of Amendment A, filed February 5, 2004, and which is incorporated by reference herein), Karube specifically teaches that the data signal lines are driven sequentially, and not simultaneously. Accordingly, for at least these additional reasons, the present invention is even further distinct from the Karube reference, and the outstanding Section 102 rejection based on Karube should be withdrawn for these additional reasons.

Claims 1-6 stand rejected under 35 U.S.C. 102(e) as being anticipated by Murade et al. (6,377,235). Applicants respectfully traverse this rejection for reasons similar to those discussed above in traversing the rejection based on the Karube reference. Murade fails to teach or suggest that each data signal line is driven by a plurality of driving devices together simultaneously so as to increase the driving capability of the display.

Contrary to the Examiner's assertions on page 4 of Paper No. 8, Murade does not teach or suggest that each data signal line is driven by a plurality of driving devices together simultaneously. Figs. 1-2 of Murade, as cited by the Examiner, only teach one single data line driving circuit 101 for driving the data lines 35. Murade even specifically describes that the "data line driving circuit 101 in particular...is the example of the data line driving means." (Col. 16, lines 46-48).

The other elements of Murade identified by the Examiner -- the shift register 111, the image signal line 304, and the sampling circuit 301 -- cannot be reasonably interpreted to be “driving devices,” as asserted by the Examiner. The shift register 111, for example, is specifically shown by Murade to be one element of the data line driving circuit 101 itself. (See Fig. 2). Image signal line 304, on the other hand, is identified by Murade to supply image signals, and not necessarily to drive the signal lines themselves. Similarly, circuit 301 is identified as a sampling circuit, and not a driving circuit. Murade only identifies one other driving circuit in Figs. 1-2, namely, the scanning line driving circuit 104. The scanning line driving circuit 104, however, is shown to drive the scanning lines 31, and not the data lines 35.

In contrast, and as discussed above, claim 1 of the present invention features a plurality of driving devices together simultaneously driving each data signal line. Again, Murade only discloses one driving circuit (101) that could reasonably be interpreted to be analogous to the plurality of driving devices recited in claim 1. In further contrast, Fig. 12 of the present Application, for example, illustrates an embodiment utilizing such a plurality of driving devices. In this example, three driver ICs DRV1-3 are shown to together simultaneously drive each data signal line DL1, DL2, etc. Murade shows no such similar configuration, where three driving circuits together simultaneously drive each data line.

With regard to claim 5 of the present invention specifically, claim 5 has been amended similarly to claim 1, but alternatively features that each data signal line is driven by a plurality of sets of the same image display data simultaneously so as to increase the driving capability. Fig. 2 of Murade clearly shows that each data line 35 is connected to only one

single image signal line (VID 1-6) of the plurality of image signal lines 304. Murade shows no teaching or suggestion that each data line 35 could be driven simultaneously using a plurality of sets of the same image display data from the image signal lines 304. Murade also shows no configuration that could increase the driving capability of each data line by utilizing a plurality of sets of the same image display data simultaneously for each line. Accordingly, for at least these reasons, the Section 102 rejection of independent claims 1 and 5, as well as their respective dependent claims, based on Murade, is respectfully traversed.

Claims 1-6 stand rejected under 35 U.S.C. 102(e) as being anticipated by Zhang et al. (U.S. 6,611,261). Applicants respectfully traverse this rejection for reasons similar to those discussed above with respect to the rejections based on Karube and Murade. With respect to independent claim 1, the portions of Zhang cited by the Examiner show each signal line 22 being driven only by a single driver 12. With respect to independent claim 5, the cited portions of Zhang show each signal line 22 being driven using only a single signal from one of the blocks BL1, BL2, etc. In other words, the Examiner has not identified any portion of Zhang where more than one driver is utilized to drive a same data line, or where more than one set of the same image display data is utilized for a single data line being driven. Accordingly, for at least these reasons, the Section 102 rejection of claims 1-6 based on Zhang is respectfully traversed.

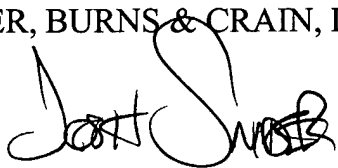
Claims 7-12 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Murade in view of Yamazaki et al. (U.S. 6,392,628). Claims 7-12 have been cancelled without prejudice, rendering this rejection now moot.

For all of the foregoing reasons, Applicants submit that this Application, including claims 1-6, is in condition for allowance, which is respectfully requested. The Examiner is invited to contact the undersigned attorney if an interview would expedite prosecution.

Respectfully submitted,

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By

A handwritten signature in black ink, appearing to read "Josh C. Snider", is written over the printed name.

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